

General Manure Application Guidelines

- Take regular soil tests on fields where manure is to be applied. Apply manure on the basis of crop nitrogen needs where soil test phosphorus levels (STP) are below 50 ppm, or on the basis of crop phosphorus needs when STP level are from 50 to 100 ppm. Do not apply manure to fields when the STP level is above 100 ppm.
- Apply manure at agronomic rates based on the nutrients in the manure, soil test levels, realistic crop yield goals, and the crop nutrient requirements given in the following table:

CROP	Unit	N	P205	K20
Alfalfa	ton	56.6	13.3	60.0
Barley	bu	1.45	0.55	1.45
Corn Grain	bu	0.9	0.37	0.87
Corn Silage	ton	9.0	3.1	9.0
Grass Hay	ton	40	12.9	58.8
Grass Pasture	ton	31.6	12.7	58.8
Oats	bu	1.15	0.4	1.45
Onions	cwt	0.3	0.13	0.27
Potatoes	cwt	0.5	0.18	0.7
Safflower	lb	0.05	0.03	0.05
Small Grain Hay	ton	11.2	5.15	9.02
Sudangrass	ton	13.6	3.7	17.4
Wheat (Fall Dry)	bu	2	0.75	2
Wheat (Irrigated)	bu	1.7	0.7	2

- Reduce commercial fertilizer rates accordingly when using manure as a nutrient source.
- Service and calibrate application equipment to ensure manure is applied uniformly and at the correct rate. Do not clean application equipment in areas where water can get into a well, stream, river, or other waterbody.
- Incorporate manure with tillage equipment or sprinkler systems where possible and as soon as possible after application to prevent surface runoff.
- Do not apply manure within 50 foot of a stream, river, irrigation return flow ditch, canal, well, or other waterbody. Consider larger setbacks on slopes greater than 5 percent.
- Do not apply manure on steep slopes unless measures are taken to control both soil erosion and runoff.
- Do not apply manure in sensitive areas (e.g. areas where the watertable is 2 feet deep or less, where soils are extremely sandy or gravelly, in wetland areas, on fields that are saturated, next to streams, or in a flood plain).
- Apply manure in the spring, summer, or fall when it can be incorporated properly, as well as be used by growing crops more efficiently.
- Avoid manure applications on frozen or snow covered ground. If manure must be applied on frozen or snow covered ground, do so on areas where surface runoff is controlled by diking or other means.
- Manage irrigation water to minimize over application and leaching of nitrates to groundwater or runoff of nutrients to surface waters.
- Avoid application when soils are wet in order to prevent compaction and rutting.
- Spread at times and in ways that will minimize potential odor problems (e.g. spread when the wind is not blowing, spread in the morning when the air is rising rather than in the afternoon, etc.).
- Keep good records of manure applications. Record the crops grown, field(s) and acres that manure is applied to, rate of application, total amount of manure applied, time of application, conditions during application, crop yields, and soil and manure test results.

Note: For more information on proper application of manure, contact the nearest Natural Resources Conservation Service office, Soil Conservation District office, or Utah State University County Extension office.